

REMARKS

Rejections of the Claims

The applicants have carefully considered the office action dated January 21, 2009, and the references applied to the claims thereby. By way of this response, claims 182-193 have been canceled without prejudice. Claims 194, 200, 206, and 212 are independent. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all pending claims are in condition for allowance and favorable reconsideration is respectfully requested.

Rejections under 35 USC §103

Turning to the art rejections, the office action rejected all claims over Williams et al. (US 5,945,988) (“Williams”) in view of Maissel, et al. (US P.G. Pub. 2003/0088872) (“Maissel”), or the combination of Williams, Maissel, and Eldering (US 6,457,010). The office action addresses independent claims 182, 184, and 186, but does not reject the claims 194-212, except to say that these claims are rejected for the same reasons as claims 182 and 183. It is respectfully submitted that such a rejection is improper because claims 194-212 include different recitations than claims 182-183. The applicants respectfully request clarification of the rejections of claims 194-212, or withdrawal of the rejections.

Claims 194, 200, 206

Claim 194 recites, *inter alia*, determining a first probability that the first audience member is in the audience based on a first viewing count and a second viewing count. Neither Williams nor Maissel teach or suggest a first probability based on a first viewing count and the second viewing count and, thus, no combination of these references can teach such a recitation.

The methods and apparatus described by Williams are directed to automatically determining and dynamically updating user preferences in an entertainment system. The system

of Williams determines which user of multiple known users is using the system and configures system configuration settings based on the user preferences. See Williams, 5:8-36. The user preference information includes favorite programs, favorite channels, and typical watching periods, which can be programmed by prompting the user for feedback. See Williams 6:46-60. The system may store the user preference information locally or remotely. See Williams, 5:60-6:7. When the system is configured in accordance with the user preference information, the system locates programs that may be of interest to the user. See Williams, 7:63-8:42; 12:5-14.

To determine which single user of the multiple potential users is currently using the system, Williams populates a behavior log by monitoring user interactions with the system and current system settings. See Williams, 8:56-8:64. The behavior log details the channels, programs, and web pages that are viewed by users during individual time periods of each day. See Williams, 13:55-14:24. The system compares the information in the behavior log to the user preference information by 1) calculating a user metric for each user and the behavior log, and 2) comparing each user metric to the behavior log metric until a match is found. See Williams, 8:64-9:30. To generate the metric, the system weights the various configurable options, calculates the values, and adds the values together. See Williams, 9:31-46. When comparing the user metric to the behavior log metric, if the user metric is greater than the behavior log metric, the system determines that the user is the current user of the system. See Williams, 9:46-63. The system can perform functions for any of the users that are not logged into the system. See Williams, 15:3-26.

As shown from the foregoing, neither the applied portions nor the entirety of Williams teaches or suggests determining a probability that a first audience member is in an audience based on a first viewing count and a second viewing count. While Williams may determine an

identify of a user based on metrics or probability, Williams discusses comparing a first user metric to a behavior log metric to determine whether that particular user is a match. See Williams, 8:64-9:30. Williams may then perform the same function on a second user. *Id.* However, Williams is silent to the second user metric influencing whether the first user is the current system user. Therefore, Williams does not teach or suggest determining a probability that a first audience member is in an audience based on a first viewing count and a second viewing count.

The office action directs attention to column 8, line 59 – column 9, line 63 of Williams, which describes a system controller to monitor a user behavior log and user inputs and interactions. See office action, pages 4-5. According to the office action, the noted portion further describes automatically determining, via statistically generated information from the behavior log and information from a camera, the identity of a user at the receiver. See office action, page 5. The system controller calculates a user metric for a user, compares the metric to a behavior log metric, and determines that the corresponding user is using the system if the resulting probability is greater than a threshold. *Id.* If no users have a probability exceeding the threshold, the system displays images of possible users for the user to select. *Id.* However, the selection of a user is based on the probability of the corresponding user metric or an explicit selection by a user. See Williams, 8:56-9:30. Therefore, the probability that the first user is the current system user is not influenced by the second user metric. For this additional reason, Williams does not teach or suggest determining a probability that a first audience member is in an audience based on a first viewing count and a second viewing count.

Maissel is similarly deficient. While Maissel identifies multiple viewers in an audience at the same time, the system of Maissel uses well known techniques to identify viewers, such as

requiring each viewer to log in using a PIN. See Maissel, paragraph [0171]. Maissel is silent to using probability to determine whether an audience member is in an audience. Maissel is also silent to the probability first audience member being based on the viewing count of a second audience member. In contrast, claim 194 recites determining a first probability that a first audience member is in an audience based on a first viewing count and a second viewing count. Maissel does not teach or suggest determining a probability that a first audience member is in an audience based on a first viewing count and a second viewing count and, thus, does not overcome the deficiencies of Williams.

Because none of Williams, Maissel, or a combination thereof describes determining a probability that a first audience member is in an audience based on a first viewing count and a second viewing count, no combination of these references can teach such a recitation. In view of the foregoing remarks, it is respectfully submitted claim 194, and all claims depending therefrom, are patentable.

Claim 200 recites an article of manufacture to, *inter alia*, determine a first probability that the first audience member is in the audience based on the first viewing count and the second viewing count. As explained above, neither Williams nor Maissel, or a combination thereof, teaches or suggests determining a first probability that the first audience member is in the audience based on the first viewing count and the second viewing count. Therefore, claim 200 and all claims depending therefrom are allowable over the applied art.

Claim 206 recites a measurement apparatus that, *inter alia*, determines a first probability that the first audience member is in the audience based on the first viewing count and the second viewing count. As explained above, neither Williams nor Maissel, or a combination thereof, teaches or suggests determining a first probability that the first audience member is in the

audience based on the first viewing count and the second viewing count. Therefore, claim 206 and all claims depending therefrom are allowable over the applied art.

Claims 197, 203, 209

Claim 197 recites, *inter alia*, comparing a count of audience members to a number of audience members that are logged in to a measurement apparatus at a first location. Further to independent claims 194, 200, and 206, neither of Williams nor Maissel, or a combination thereof, describes comparing a count of audience members to a number of audience members that are logged in to a measurement apparatus at a first location.

Williams does not teach or suggest a count of audience members, much less comparing a count of audience members to a number of audience members that are logged in at a first location. At most in this regard, the Williams system has one person logged in but does not determine a count of audience members. However, the number of audience members logged in at the first location is essentially meaningless to the Williams system, because Williams is concerned with updating the qualitative data (e.g., programs, channels, times) associated with the logged-in user's profile as opposed to monitoring the number of logged-in users (i.e., one). Therefore, Williams does not teach or suggest comparing a count of audience members to a number of audience members that are logged in to a measurement apparatus at a first location, and there is no useful motivation to modify Williams as such.

Maissel describes displaying "a proportion of an audience viewing a program" (Maissel, paragraphs [0078]-[0080]), but does not describe comparing the count of audience members to the number of logged-in audience members at a first location. Maissel defines "audience" as "the sum total audience viewing all programs at a particular time, or to the total audience of viewers who are capable of receiving programs at a particular time." See Maissel, paragraph

[0246]. Even if the system of Maissel did compare the proportion of an audience viewing the program (i.e., a “count of audience members,” the local/national audience viewing the program) to the number of logged-in audience members, the comparison would not be particularly useful because the comparison would almost always be way out of proportion. Therefore, Maissel does not overcome the deficiencies of Williams.

Neither Williams nor Maissel, or any combination thereof, teach or suggest comparing a count of audience members to a number of audience members that are logged in to a measurement apparatus at a first location. Based at least on the foregoing, it is respectfully submitted that claims 197, 203, and 209 are in condition for allowance.

Claim 212

Claim 212 recites, *inter alia*, determining an expected number of audience members based on historical tuning information for known audience members during corresponding day parts, and determining whether the expected number of audience members is greater than a first threshold. Neither Williams nor Maissel, or a combination thereof, describes determining an expected number of audience members, much less determining an expected number of audience members based on historical tuning information during corresponding day parts, or determining whether the expected number of audience members is greater than a first threshold.

Williams is not concerned with an expected number of audience members present in an audience of a program, and certainly does not compare an expected number to a threshold. Rather, Williams is concerned with identifying a single active user and then activating the individual user’s preferences. Only the preferences for that particular user may be operative at any given time. Additionally, Williams cannot be modified to expect a number of users, because Williams is directed to automatically determining and updating user preferences. Sets of user

preferences are mutually exclusive by definition, as identical user preferences would eliminate the need for defining the preferences of individual users. After identifying the user (singular) of the system, Williams is not concerned with additional users, and thus does not count the number of audience members or expect such a number of audience members. Therefore, Williams does not teach, and cannot be modified to teach, determining an expected number of audience members based on historical tuning information for known audience members during corresponding day parts, and determining whether the expected number of audience members is greater than a first threshold.

Maissel does not overcome the deficiencies of Williams. Maissel describes displaying “a proportion of an audience viewing a program” (Maissel, paragraphs [0078]-[0080]), but the proportion of an audience is a determined number based on a wide audience as opposed to an expected number. Maissel is silent to determining an expected number of audience members and determining whether the expected number is greater than a first threshold. Therefore, no combination of Williams and Maissel can teach claim 212.

Conclusion

For at least the foregoing reasons, it is respectfully submitted all pending claims are in condition for allowance, and an indication thereof is respectfully requested. If the Examiner is of the opinion that a telephone conference would expedite the prosecution of this case, the Examiner is invited to contact the undersigned attorney at the number identified below.

Respectfully submitted,

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